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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,696	09/19/2001	David B. Anderson	CR-1351	9759
7590 12/12/2005			EXAMINER	
Patent Department Mitsubishi Electric Research Laboratories, Inc. 201 Broadway Cambridge, MA 02139			PHAN, MAN U	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 12/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. CK 09/955,696	Applicant(s) ANDERSON ET AL.	
	Examiner Man Phan	Art Unit 2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 13 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment and Argument

1. This communication is in response to applicant's 09/16/2005 response in the application of Anderson et al. for the "Voice operated two way asynchronous radio" filed 09/19/2001. The amendment and response has been entered and made of record. Claims 4, 5, 9, 15 have been amended. Claims 1-17 are pending in the application.
2. Applicant's amendment to the rejected claims are insufficient to distinguish the claimed invention from the cited prior arts or overcome the rejection of said claims under 35 U.S.C. 103 as discussed below. Applicant's remarks with respect to the pending claims have been fully considered, but they are not persuasive for at least the following reasons.
3. Applicant's argument with respect to the rejected claims 1 and 17 (page 7) that the cited reference "*never teaches, shows or suggests determining whether the first acoustic signal is a command and otherwise sending the first acoustic signal as an output audio message*". However, Kimura (US#5,267,323) discloses in Fig. 6 illustrated the electronic circuit of the transmitter 1 in greater detail. The speech recognition unit 2 (Fig. 5) comprises a speech recognition circuit 15 and a controller 16. The transmitting unit (Fig. 5) comprises a transmitting circuit 17 and an infrared light-emitting diode D1 connected thereto. The controller 16 is connected between the speech recognition circuit 15 and the transmitting circuit 17. As shown in Fig. 7, the speech recognition circuit 15 comprises an analog processor 21 for processing an analog voice command signal which is received through the microphones M1, M2 and outputting the

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processed analog voice command signal as a time-division digital data 20, a speech recognition processor 22 for recognizing the voice command based on the time-division digital data 20 from the analog processor 21 (*the speech recognizer 15 and the controller 16 determine whether the acoustic signal M1, M2 is a command or not a command*) (Col. 8, lines 7 plus). Kimura further teaches in Fig. 10 the flow chart illustrated the operation of the transmitter, in which the controller 16 reads the condition of the mode selector switch 13 to determine whether it indicates the speech registration mode for voice commands or not in a step S5. If the speech registration mode is indicated, control then goes to a step S6 in which the controller 16 outputs a command to instruct the speech recognition circuit 15 to carry out a speech registration process (*determining whether the input audio signal is a command or not*). (Col. 11, lines 35 plus).

Applicant alleges that the reference does not teach the step of “*storing acoustic signals in either an input or an output buffer*” (page 8, first paragraph). However, Nichols (US#5,109,525) discloses a two-way radios having a voice storage means, which can be utilized to store and later transmit a voice message. Known voice storage radios are utilized for voice mailbox purposes. That is, voice messages are either received and stored by the radio for later review, or the message is stored and later transmitted on command or request. These approaches provide for either incoming or outgoing voice mail (*voice storage means including a digitizer for digitizing voice signals and a memory for storing digitized voice signals if the communication channel is not available*) (See Fig. 1, and Col. 3, lines 35 plus) .

Therefore, the Examiner maintains that the references cited and applied in the last office actions for the rejection of the claims are maintained in this office action.

Claim Rejections - 35 USC ' 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-12, 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura (US#5,267,323) in view of Nichols (US#5,109,525).

With respect to claims 1, 2 and 17, Kimura (US#5,267,323) and Nichols (US#5,109,525) disclose a novel system and method for voice operated using two way radio for communicating audio messages, according to the essential features of the claims. Kimura (US#5,267,323)

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discloses in Fig. 5 a functional block diagram illustrated the voice operated remote controller, includes an input device for generating a first acoustic signal. The first microphone M1 serves to input a voice command, and the second microphone M2 serves to pick up ambient sound or noise other than voice commands, around the transmitter 10A. Each of the microphones M1, M2 converts an applied acoustic signal into an electric signal. The speech recognition unit 2 recognizes the voice command based on the electric signal, and produces command data corresponding to the voice command based on the result of recognition, and sends the command data to a transmitting unit 3 (See also Fig. 7; Col. 7, lines 51 plus). Kimura further teaches in Fig. 6 shows the electronic circuit of the transmitter, in which the speech recognition unit 2 (Fig. 5) comprises a speech recognition circuit 15 and a controller 16 which is connected between the speech recognition circuit 15 and the transmitting circuit 17. The talk switch 12, which is connected to the controller 16, supplies the controller 16 with an operation control signal Sc which enables the transmitter 1 to operate only when a voice command is applied (*determining whether the acoustic signal is a command or output message*)(Col. 8, lines 8 plus). As shown in Fig. 20, the transmitter 10D has, in addition to a speech recognition unit 2 and a transmitting unit 3, a speech storage unit 230 for storing data of voice commands and a speech reproducing unit 231 for reading voice command data from the speech storage unit 230 in response to an external reproduction command signal Si and converting the voice command data into a voice output. In the transmitter 10D, the speech storage unit 230 stores data of voice commands. When an external reproduction command signal Si is applied, the stored voice command data are read from the speech storage unit 230 by the speech reproduction unit 231, and converted into a voice output thereby. Therefore, the transmitter 10D can reproduce a

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command word corresponding to a desired control command as a voice output (Col. 18, lines 55 plus).

However, Kimura does not disclose expressly the step of sending the first acoustic signal as an output audio message only when a communication channel is available to a transmitter of the radio. In the same field of endeavor, Nichols (US#5,109,525) discloses a two-way radio includes a receiver having a squelch circuit for determining if a communication channel is available. A transmitter is provided for transmitting voice messages on the channel. When the communication channel is available, voice signals are directed from a microphone to the transmitter for transmission. When the communication channel is not available, the voice signals are automatically directed to a digitizer there they are digitized. The digitized voice signals are stored in a memory for later transmission when the channel becomes available (See Fig. 1; Col. 1, lines 42 plus and Col. 3, lines 35 plus).

Regarding claims 3-7, Kimura further teaches in Fig. 3 schematically diagram illustrated the transmitter 101 of the voice-operated remote control system 100, in which controller 16 produces and applies a remote control instruction signal SR to a transmitting circuit 17, which then energizes an infrared light-emitting diode D1 to transmit a remote control signal RC (a indicator)(Col. 6, lines 47 plus).

Regarding claims 15, 16, Nichols further teaches in Fig. 1 a block diagram illustrated a two-way radio communications, in which a speech synthesizer 36 is connected to the controller for receiving digitized voice signals from controller 24. The output of speech synthesizer 36 is connected to a second input of switch 34. The output of switch 34 supplies the audio input signal to the transmitter 16 (Col. 2, lines 40 plus).

One skilled in the art would have recognized the need for effectively and efficiently communicating audio message using two-way radio, and would have applied Nichols's novel use of the communication channel in two-way radio into Kimura's teaching of a method and apparatus for voice actuated control system for controlling appliances by way of voice commands. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Nichols's two-way radio with voice storage into Kimura's voice operated remote control with the motivation being to provide a method and system for voice operated two way asynchronous radio communication system.

7. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura (US#5,267,323) in view of Nichols (US#5,109,525) as applied to the claims above, and further in view of Betros et al. (US#2002/0099795).

With respect to claims 8-12, Kimura (US#5,267,323) and Nichols (US#5,109,525) disclose the claimed limitations discussed in paragraph 5 above. However, these claims differ from the claims above in that the claims require the feature of the message communicating via WAN and Internet networks . In the same field of endeavor, Betros et al. (US#2002/0099795) discloses in Fig. 1 a block diagram illustrated a system on which a process maintaining two-way asynchronous communication executed including servers connected to the WAN and Internet.

One skilled in the art would have recognized the need for effectively and efficiently communicating audio message using two-way radio, and would have applied Betros's novel use of WAN and Internet in two-way communications, and Nichols's communication channel

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in two-way radio into Kimura's teaching of a method and apparatus for voice actuated control system for controlling appliances by way of voice commands. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Betros's system and method for maintaining two-way asynchronous notification between a client and a web server, and Nichols's two-way radio with voice storage into Kimura's voice operated remote control with the motivation being to provide a method and system for voice operated two way asynchronous radio communication system.

Allowable Subject Matter

8. Claims 13-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for the indication of allowable subject matter: The closest prior art of record fails to disclose or suggest wherein each logical identification is in a form of a phrase having a predetermined words, the words arranged according to a predetermined grammatical structure for a particular target language; wherein a particular physical identification and an associated particular logical identification map into a plurality of phrase for a plurality of target languages, each target language having particular predetermined words and particular grammatical structure for the particular target language, as specifically recited in the claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Reed (US#5,263,181) is cited to show the remote transmitter for triggering a voice operated radio.

The Ruppert et al. (US#6,236,969) is cited to show the wearable telecommunications apparatus with voice/speech control features.

The Gokcen et al. (US#5,125,024) is cited to show the voice response unit.

The Foster et al. (US#6,931,104) is cited to show the intelligent call processing platform for home telephone system.

The Rivero et al. (US#6,184,796) is cited to show the method and apparatus for automatic telephone dialing from a pager message.

The Son et al. (US#6,212,408) is cited to show the voice command system and method.

The Runge et al. (US#2003/0110034) is cited to show the method for voice operated identification of the user of a telecommunication line in a telecommunications network during an interactive communication using a voice operated conversational system.

The Layman (US#6,826,647) is cited to show the voice operated communication interface.

The Alshawi et al. (US#2002/0072914) is cited to show the method and apparatus for creation and user customization of speech enabled services.

The King (US#6,532,446) is cited to show the server based speech recognition user interface for wireless devices.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP ' 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Phan whose telephone number is (571) 272-3149. The examiner can normally be reached on Mon - Fri from 6:00 to 3:00.

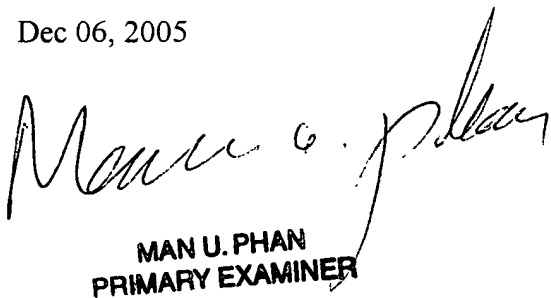
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3988. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

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12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at toll free 1-866-217-9197.

Mphan

Dec 06, 2005



MAN U. PHAN
PRIMARY EXAMINER